

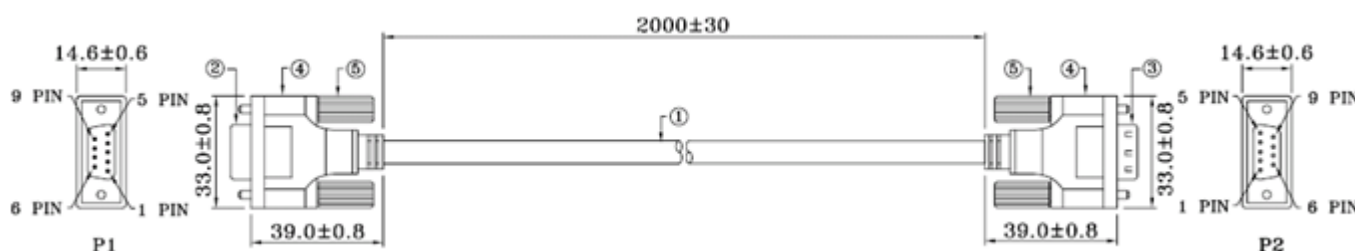
# **BenQ RS232 Commands**

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## 1. RS232 Cable Requirement and Pin Assignment

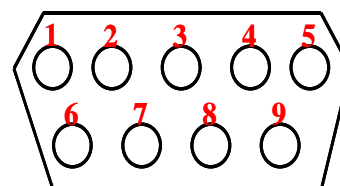
### Cable Requirement:



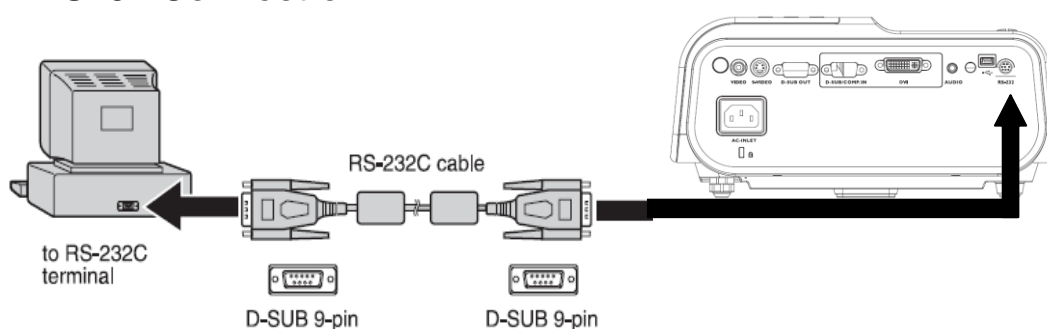
| WIRE ARRANGEMENT |            |      |
|------------------|------------|------|
| P1               | COLOR      | P2   |
| 1                | BLACK      | 1    |
| 2                | BROWN      | 3    |
| 3                | RED        | 2    |
| 4                | ORANGE     | 4    |
| 5                | YELLOW     | 5    |
| 6                | GREEN      | 6    |
| 7                | BLUE       | 7    |
| 8                | PURPLE     | 8    |
| 9                | GRAY       | 9    |
| CASE             | DRAIN WIRE | CASE |

### RS232 pin assignment

| Pin | Description | Pin | Description |
|-----|-------------|-----|-------------|
| 1   | NC          | 2   | RXD         |
| 3   | TXD         | 4   | NC          |
| 5   | GND         | 6   | NC          |
| 7   | RTS         | 8   | CTS         |
| 9   | NC          |     |             |



## 2. RS232 Connection



### Notes:

- Make sure that both of the PC and the projector are turned off before connecting them.
- Must turn on the PC before turning on the projector. (Wrong step may have Com port working incorrectly)
- PLS choose appropriate adapter for PC side.

## 2. Interface Settings - RS-232 protocol

|              |   |
|--------------|---|
| Baud Rate    | Default in 115200 bps, but changeable in OSD menu.<br>(2400/4800/9600/14400/19200/38400/57600/115200) |
| Data Length  | 8 bit   |
| Parity Check | None  |
| Stop Bit     | 1 bit   |
| Flow Control | None  |

## 3. Command Table

Note:

- The available features are different by model. (eg. source, audio settings, aspect ratio..etc.), please refer to the user manual for the further information.

| Function                | Type  | Operation         | ASCII                     |
|-------------------------|-------|-------------------|---------------------------|
| <b>Power</b>            | Write | Power On          | <CR>*pow=on#<CR>          |
|                         | Write | Power off         | <CR>*pow=off#<CR>         |
|                         | Read  | Power Status      | <CR>*pow=?#<CR>           |
| <b>Source Selection</b> | Write | COMPUTER/YPbPr    | <CR>*sour=RGB#<CR>        |
|                         | Write | COMPUTER 2/YPbPr2 | <CR>*sour=RGB2#<CR>       |
|                         | Write | Component         | <CR>*sour=ypbr#<CR>       |
|                         | Write | DVI-A             | <CR>*sour=dviA#<CR>       |
|                         | Write | DVI-D             | <CR>*sour=dvid#<CR>       |
|                         | Write | HDMI              | <CR>*sour=hdmi#<CR>       |
|                         | Write | HDMI 2            | <CR>*sour=hdmi2#<CR>      |
|                         | Write | Composite         | <CR>*sour=vid#<CR>        |
|                         | Write | S-Video           | <CR>*sour=svid#<CR>       |
|                         | Write | Network           | <CR>*sour=network#<CR>    |
|                         | Write | USB Display       | <CR>*sour=usbdisplay#<CR> |
|                         | Write | USB Reader        | <CR>*sour=usbreader#<CR>  |
|                         | Read  | Current source    | <CR>*sour=?#<CR>          |
| <b>Audio Control</b>    | Write | Mute On           | <CR>*mute=on#<CR>         |
|                         | Write | Mute Off          | <CR>*mute=off#<CR>        |
|                         | Read  | Mute Status       | <CR>*mute=?#<CR>          |
|                         | Write | Volume +          | <CR>*vol=+#<CR>           |
|                         | Write | Volume -          | <CR>*vol=-#<CR>           |

|                            |       |                        |                             |
|----------------------------|-------|------------------------|-----------------------------|
|                            | Read  | Volume Status          | <CR>*vol=?#<CR>             |
|                            | Write | Mic. Volume +          | <CR>*micvol=+#<CR>          |
|                            | Write | Mic. Volume -          | <CR>*micvol=-#<CR>          |
|                            | Read  | Mic. Volume Status     | <CR>*micvol=?#<CR>          |
| <b>Audio source select</b> | Write | Audio pass Through off | <CR>*audiosour=off#<CR>     |
|                            | Write | Audio-Computer1        | <CR>*audiosour=RGB#<CR>     |
|                            | Write | Audio-Computer2        | <CR>*audiosour=RGB2#<CR>    |
|                            | Write | Audio-Video/S-Video    | <CR>*audiosour=vid#<CR>     |
|                            | Write | Audio-Component        | <CR>*audiosour=ypbr#<CR>    |
|                            | Write | Audio-HDMI             | <CR>*audiosour=hdm#<CR>     |
|                            | Write | Audio-HDMI2            | <CR>*audiosour=hdm2#<CR>    |
|                            | Read  | Audio pass Status      | <CR>*audiosour=?#<CR>       |
| <b>Picture Mode</b>        | Write | Dynamic                | <CR>*appmod=dynamic#<CR>    |
|                            | Write | Presentation           | <CR>*appmod=preset#<CR>     |
|                            | Write | sRGB                   | <CR>*appmod=srgb#<CR>       |
|                            | Write | Bright                 | <CR>*appmod=bright#<CR>     |
|                            | Write | Living Room            | <CR>*appmod=livingroom#<CR> |
|                            | Write | Game                   | <CR>*appmod=game#<CR>       |
|                            | Write | Cinema                 | <CR>*appmod=cine#<CR>       |
|                            | Write | Standard               | <CR>*appmod=std#<CR>        |
|                            | Write | User1                  | <CR>*appmod=user1#<CR>      |
|                            | Write | User2                  | <CR>*appmod=user2#<CR>      |
|                            | Write | User3                  | <CR>*appmod=user3#<CR>      |
|                            | Read  | Picture Mode           | <CR>*appmod=?#<CR>          |
| <b>Picture Setting</b>     | Write | Contrast +             | <CR>*con=+#<CR>             |
|                            | Write | Contrast -             | <CR>*con=-#<CR>             |
|                            | Read  | Contrast value         | <CR>*con=?#<CR>             |
|                            | Write | Brightness +           | <CR>*bri=+#<CR>             |
|                            | Write | Brightness -           | <CR>*bri=-#<CR>             |
|                            | Read  | Brightness value       | <CR>*bri=?#<CR>             |
|                            | Write | Color +                | <CR>*color=+#<CR>           |
|                            | Write | Color -                | <CR>*color=-#<CR>           |
|                            | Read  | Color value            | <CR>*color=?#<CR>           |
|                            | Write | Sharpness +            | <CR>*sharp=+#<CR>           |
|                            | Write | Sharpness -            | <CR>*sharp=-#<CR>           |
|                            | Read  | Sharpness value        | <CR>*sharp=?#<CR>           |

|                    |       |                                  |                     |
|--------------------|-------|----------------------------------|---------------------|
|                    | Write | Color Temperature-Warmer         | <CR>*ct=warmer#<CR> |
|                    | Write | Color Temperature-Warm           | <CR>*ct=warm#<CR>   |
|                    | Write | Color Temperature-Normal         | <CR>*ct=normal#<CR> |
|                    | Write | Color Temperature-Cool           | <CR>*ct=cool#<CR>   |
|                    | Write | Color Temperature-Cooler         | <CR>*ct=cooler#<CR> |
|                    | Read  | Color Temperature Status         | <CR>*ct=?#<CR>      |
|                    | Write | Aspect 4:3                       | <CR>*asp=4:3#<CR>   |
|                    | Write | Aspect 16:9                      | <CR>*asp=16:9#<CR>  |
|                    | Write | Aspect 16:10                     | <CR>*asp=16:10#<CR> |
|                    | Write | Aspect Auto                      | <CR>*asp=AUTO#<CR>  |
|                    | Write | Aspect Real                      | <CR>*asp=REAL#<CR>  |
|                    | Write | Aspect Letterbox                 | <CR>*asp=LBOX#<CR>  |
|                    | Write | Aspect Wide                      | <CR>*asp=WIDE#<CR>  |
|                    | Write | Aspect Anamorphic                | <CR>*asp=ANAM#<CR>  |
|                    | Read  | Aspect Status                    | <CR>*asp=?#<CR>     |
|                    | Write | Digital Zoom In                  | <CR>*zoomI#<CR>     |
|                    | Write | Digital Zoom out                 | <CR>*zoomO#<CR>     |
|                    | Write | Auto                             | <CR>*auto#<CR>      |
|                    | Write | Brilliant color on               | <CR>*BC=on#<CR>     |
|                    | Write | Brilliant color off              | <CR>*BC=off#<CR>    |
|                    | Read  | Brilliant color status           | <CR>*BC=?#<CR>      |
| Operation Settings | Write | Projector Position-Front Table   | <CR>*pp=FT#<CR>     |
|                    | Write | Projector Position-Rear Table    | <CR>*pp=RE#<CR>     |
|                    | Write | Projector Position-Rear Ceiling  | <CR>*pp=RC#<CR>     |
|                    | Write | Projector Position-Front Ceiling | <CR>*pp=FC#<CR>     |
|                    | Write | Quick auto search                | <CR>*QAS=on#<CR>    |
|                    | Write | Quick auto search                | <CR>*QAS=off#<CR>   |
|                    | Read  | Quick auto search status         | <CR>*QAS=?#<CR>     |
|                    | Read  | Projector Position Status        | <CR>*pp=?#<CR>      |

|                     |       |  |                           |
|---------------------|-------|--|---------------------------|
|                     | Write | Direct Power On-on                     | <CR>*directpower=on#<CR>  |
|                     | Write | Direct Power On-off                    | <CR>*directpower=off#<CR> |
|                     | Read  | Direct Power On-Status                 | <CR>*directpower=?#<CR>   |
|                     | Write | Signal Power On-on                     | <CR>*autopower=on#<CR>    |
|                     | Write | Signal Power On-off                    | <CR>*autopower=off#<CR>   |
|                     | Read  | Signal Power On-Status                 | <CR>*autopower=?#<CR>     |
|                     | Write | Standby<br>Settings-Network on         | <CR>*standbynet=on#<CR>   |
|                     | Write | Standby<br>Settings-Network off        | <CR>*standbynet=off#<CR>  |
|                     | Read  | Standby<br>Settings-Network Status     | <CR>*standbynet=?#<CR>    |
|                     | Write | Standby<br>Settings-Microphone on      | <CR>*standbymic=on#<CR>   |
|                     | Write | Standby<br>Settings-Microphone off     | <CR>*standbymic=off#<CR>  |
|                     | Read  | Standby<br>Settings-Microphone Status  | <CR>*standbymic=?#<CR>    |
|                     | Write | Standby Settings-Monitor<br>Out on     | <CR>*standbymnt=on#<CR>   |
|                     | Write | Standby Settings-Monitor<br>Out off    | <CR>*standbymnt=off#<CR>  |
|                     | Read  | Standby Settings-Monitor<br>Out Status | <CR>*standbymnt=?#<CR>    |
| <b>Baud Rate</b>    | Write | 2400                                   | <CR>*baud=2400#<CR>       |
|                     | Write | 4800                                   | <CR>*baud=4800#<CR>       |
|                     | Write | 9600                                   | <CR>*baud=9600#<CR>       |
|                     | Write | 14400                                  | <CR>*baud=14400#<CR>      |
|                     | Write | 19200                                  | <CR>*baud=19200#<CR>      |
|                     | Write | 38400                                  | <CR>*baud=38400#<CR>      |
|                     | Write | 57600                                  | <CR>*baud=57600#<CR>      |
|                     | Write | 115200                                 | <CR>*baud=115200#<CR>     |
|                     | Read  | Current Baud Rate                      | <CR>*baud=?#<CR>          |
| <b>Lamp Control</b> | Read  | Lamp Hour                              | <CR>*ltim=?#<CR>          |
|                     | Read  | Lamp2 Hour                             | <CR>*ltim2=?#<CR>         |
|                     | Write | Normal mode                            | <CR>*lampm=lnor#<CR>      |

|               |       |  |                             |
|---------------|-------|--|-----------------------------|
|               | Write | Eco mode                                       | <CR>*lampm=eco#<CR>         |
|               | Write | Smart Eco mode                                 | <CR>*lampm=seco#<CR>        |
|               | Write | Dual Brightest<br>(for dual lamp only)         | <CR>* lampm =dualbr#<CR>    |
|               | Write | Dual Reliable<br>(for dual lamp only)          | <CR>* lampm =dualre#<CR>    |
|               | Write | Single Alternative<br>(for dual lamp only)     | <CR>* lampm =single#<CR>    |
|               | Write | Single Alternative Eco<br>(for dual lamp only) | <CR>* lampm =singleeco#<CR> |
|               | Read  | Lamp Mode Status                               | <CR>*lampm=?#<CR>           |
| Miscellaneous | Read  | Model Name                                     | <CR>*modelname=?#<CR>       |
|               | Write | Blank On                                       | <CR>*blank=on#<CR>          |
|               | Write | Blank Off                                      | <CR>*blank=off#<CR>         |
|               | Read  | Blank Status                                   | <CR>*blank=?#<CR>           |
|               | Write | Freeze On                                      | <CR>*freeze=on#<CR>         |
|               | Write | Freeze Off                                     | <CR>*freeze=off#<CR>        |
|               | Read  | Freeze Status                                  | <CR>*freeze=?#<CR>          |
|               | Write | Menu On  | <CR>*menu=on#<CR>           |
|               | Write | Menu Off                                       | <CR>*menu=off#<CR>          |
|               | Write | Up   | <CR>*up#<CR>                |
|               | Write | Down   | <CR>*down#<CR>              |
|               | Write | Right  | <CR>*right#<CR>             |
|               | Write | Left   | <CR>*left#<CR>              |
|               | Write | Enter  | <CR>*enter#<CR>             |
|               | Write | 3D Sync Off                                    | <CR>*3d=off#<CR>            |
|               | Write | 3D Sync Top Bottom                             | <CR>*3d=tb#<CR>             |
|               | Write | 3D Sync Frame<br>Sequential                    | <CR>*3d=fs#<CR>             |
|               | Read  | 3D Sync Status                                 | <CR>*3d=?#<CR>              |
|               | Write | Remote<br>Receiver-front+rear                  | <CR>*rr=fr#<CR>             |
|               | Write | Remote Receiver-front                          | <CR>*rr=f#<CR>              |
|               | Write | Remote Receiver-rear                           | <CR>*rr=r#<CR>              |
|               | Read  | Remote Receiver Status                         | <CR>*rr=?#<CR>              |
|               | Write | Instant On-on                                  | <CR>*ins=on#<CR>            |



|  |       |                               |                            |
|--|-------|-------------------------------|----------------------------|
|  | Write | Instant On-off                | <CR>*ins=off#<CR>          |
|  | Read  | Instant On Status             | <CR>*ins=?#<CR>            |
|  | Write | Lamp Saver Mode-on            | <CR>*lpsaver=on#<CR>       |
|  | Write | Lamp Saver Mode-off           | <CR>*lpsaver=off#<CR>      |
|  | Read  | Lamp Saver Mode Status        | <CR>*lpsaver=?#<CR>        |
|  | Write | Projection Log In Code on     | <CR>*prjlogincode=on#<CR>  |
|  | Write | Projection Log In Code off    | <CR>*prjlogincode=off#<CR> |
|  | Read  | Projection Log In Code Status | <CR>*prjlogincode=?#<CR>   |
|  | Write | Broadcasting on               | <CR>*broadcasting=on#<CR>  |
|  | Write | Broadcasting off              | <CR>*broadcasting=off#<CR> |
|  | Read  | Broadcasting Status           | <CR>*broadcasting=?<CR>    |
|  | Write | AMX Device Discovery-on       | <CR>*amxdd=on#<CR>         |
|  | Write | AMX Device Discovery-off      | <CR>*amxdd=off#<CR>        |
|  | Read  | AMX Device Discovery Status   | <CR>*amxdd=?#<CR>          |
|  | Read  | Mac Address                   | <CR>*macaddr=?#<CR>        |
|  | Write | High Altitude mode on         | <CR>*Highaltitude=on#<CR>  |
|  | Write | High Altitude mode off        | <CR>*Highaltitude=off#<CR> |
|  | Read  | High Altitude mode status     | <CR>*Highaltitude=?#<CR>   |